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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,890	01/18/2007	Keith Froggatt	1032899-000031	5020

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EXAMINER

STELLING, LUCAS A

ART UNIT	PAPER NUMBER
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1797

NOTIFICATION DATE	DELIVERY MODE
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10/01/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/578,890	Applicant(s) FROGGATT, KEITH	
	Examiner Lucas Stelling	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 40-42, 44, 45 and 47-61 is/are pending in the application.
- 4a) Of the above claim(s) 50-59 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 40-42, 44, 45, 47-49, 60, and 61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 40-42, 44, 47-49, and 60 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,245,230 to Ricci ("Ricci") as evidenced by Heskett and U.S. Patent No. 5,702,494 to Tompkins et al. ("Tompkins").

3. As to claim 40, Ricci teaches a water distribution system (**See col. 3 lines 30-35, the sphere is placed in a bathtub, which tub is ordinarily part of a water distribution system; see also col. 1 lines 35-40**), including one or more circulation members (**See in the Figures, especially Fig. 5; 10 and 12 combined**), through which water can pass (**See 16 and 14 in the Figures; the member is open to the passage of water**), wherein one or more decontaminating members (**30 and 36 comprises a mesh of decontaminating filament material which is covered in a gauze-like fabric ball, see col. 3 lines 8-20**) are restrainably located within the or each circulation member and freely movable therein (**See in the Figures, the decontaminating member is restrained inside the circulation member by the gauze-like cover 30, but otherwise the decontaminating member is not attached and can move around inside the circulation member**), the or each decontaminating member having an outer surface of an antibacterial material (**See Ricci col. 3 lines 40-47, the decontaminating**

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member is composed of copper-zinc alloy; also look to Heskett col. 3 lines 25-35 for evidence that copper, zinc, and alloys thereof have bactericidal properties),

wherein the or each decontaminating member is in the form of a mesh (**See col. 3 lines 5-15, the filter material is composed of spun filaments of copper-zinc alloy which are formed into a steel wool-like mesh, and see Fig. 5; look to Tompkins for evidence that metal wool is considered a nonwoven mesh, Tompkins col. 8 line 16), and**

wherein filter means are provided at an upstream and/or downstream part of the or each circulation member to prevent the decontaminating member or members passing out of the circulation member (**30 in the Figures and col. 3 lines 15-22; when the circulation member is placed into water, water rushes in through the holes 14 or 16 and contacts the alloy inside, see col. 3 lines 25-30. The fabric cover is therefore, at least downstream of the circulating member when it is placed into the water. Conversely, the cover is upstream of the circulation member when the member is withdrawn, and water drains out of it; the cover prevents filament, decontaminating member material from passing out of the circulation member, see col. 3 lines 15-22).**

4. As to claim 41, Ricci teaches the system of claim 40, and in Ricci the decontaminating member fills most of the interior space, and therefore, it would be located in the lowermost part of the circulation member (**See in the Figures).**

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5. As to claim 42, Ricci teaches the system of claim 40, and in Ricci the decontaminating member round shaped to fit into the circulation member **(See in the Figures)**. The round shape is a contoured surface.

6. As to claim 44, Ricci teaches the system of claim 40, and in Ricci the metal wool has many passages between the filaments.

7. As to claim 47, Ricci teaches the system of claim 40, and the filter means are made from a copper-zinc alloy, which is antibacterial **(See Ricci col. 3 lines 40-47, and look to Heskett col. 3 lines 25-35, for further evidence that copper-zinc alloys are anti-bacterial)**.

8. As to claim 48, Ricci teaches the system of claim 40, and the filter means are in the form of a body of mesh material **(See col. 3 lines 5-15, the filter material is composed of spun filaments of copper-zinc alloy which are formed into a steel wool-like mesh, and see Fig. 5; look to Tompkins for evidence that metal wool is considered a nonwoven mesh, Tompkins col. 8 line 16)**.

9. As to claim 49, Ricci teaches the system of claim 40, and the body of mesh is almost the same size as the cavity of the circulation member allowing for a friction fit within the member **(See Ricci Fig. 5)**.

As to claim 60, Ricci teaches the system of claim 40, and in Ricci the filter means are provided at fluidly upstream and downstream parts of the or each circulation **(30 in the Figures and col. 3 lines 15-22; when the circulation member is placed into water, water rushes in through the holes 14 or 16 and contacts the alloy inside,**

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see col. 3 lines 25-30. Conversely, the cover is upstream of the circulation member 10/12 when the member is withdrawn, and water drains out of it).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 45 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ricci as evidenced by Heskett and Tompkins.

13. As to claim 45, Ricci as evidenced by Heskett and Tompkins teaches the system of claim 40, but Ricci does not mention using multiple decontaminating members. The use of multiple spheres would be an obvious duplication of parts, as it would provide for additional treatment material which would allow for a more rapid treatment of liquid. See also MPEP 2144.04(VI)(B). The units will either float or sink depending on their buoyancy.

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14. As to claim 61, Ricci as evidenced by Heskett and Tompkins teaches the system of claim of claim 40, but Ricci contemplates that zinc-copper alloy is a metal wool, but does not mention that the member defines a predetermined pattern of open space. However, a person of ordinary skill in the art would have known that the filaments should be essentially evenly spaced in the circulation member in order to provide for maximum utilization; and the person having ordinary skill would also recognize that the spaces must be open enough to allow water to fully circulate through the member allowing for efficient contact with anti-bacterial filaments throughout the entire member. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to predetermine even spacing and enough open space to allow free circulation of water through the member; thereby providing a random pattern of essentially evenly spaced openings through the member.

Response to Arguments

15. Applicant's arguments filed 6-18-09 have been fully considered but they are not persuasive.

16. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

17. With respect to applicant's argument that randomly oriented fibers, or filaments, do not constitute a mesh, applicant's attention is directed to Tompkins which recognizes that "metal wool" is considered a non-woven mesh material **(See discussion above)**. Moreover, there is no requirement that a mesh be a woven-type mesh in order for the holes, or passages, in the aggregate mesh to be essentially evenly spaced throughout.

Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lucas Stelling whose telephone number is (571)270-3725. The examiner can normally be reached on Monday through Thursday 12:00PM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Las 9-28-09

/Matthew O Savage/
Primary Examiner, Art Unit 1797